ATTORNEY DOCKET NO.: 46884-5451

Application No.: 10/565,945

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IN THE CLAIMS:

Please amend the claims as follows.

Claim 1 (Currently Amended): A back illuminated photodetector comprising:

a first conductive type semiconductor substrate;

a second conductive type impurity semiconductor region provided in a first superficial

surface layer of said semiconductor substrate;

a recessed portion for incidence of to-be-detected light formed in a second surface of said

semiconductor substrate and in an area opposite said impurity semiconductor region;

a coating layer made of resin for transmitting said to-be-detected light to said recessed

portion and having a substantially flat surface, said coating layer being provided on the second

surface; and

a window plate provided on said substantially flat surface of said coating layer to transmit

said to-be-detected light to said coating layer,

wherein said coating layer consists of a first resin layer provided on the second surface

and a second resin layer provided on said first resin layer and having said substantially flat

surface on the opposite side of said first resin layer, and

wherein said first resin layer is arranged in such a manner that a portion of the first resin

layer provided on said recessed portion in the second surface is sunk lower than a portion of the

first resin layer provided on an outer edge portion of said recessed portion.

Claim 2 (Canceled).

DC01/2182111.1

Claim 3 (Currently Amended): The back illuminated photodetector according to claim 1

or 2, further comprising a supporting film provided on the first surface of said semiconductor

substrate to support said semiconductor substrate.

Claim 4 (Original): The back illuminated photodetector according to Claim 3, further

comprising a filling electrode penetrating through the supporting film and connected electrically

to the impurity semiconductor region at one end thereof.

Claim 5 (Previously Presented): The back illuminated photodetector according to claim

1, wherein said window plate has a square cross-sectional shape with at least one corner being

chamfered in a plane perpendicular to the thickness direction thereof.

Claim 6 (Previously Presented): The back illuminated photodetector according to claim 1,

wherein a highly-doped impurity semiconductor region with impurities of said first conductive

type added thereto at a high concentration is exposed across the entire side surface of said

semiconductor substrate.

Claim 7 (Currently Amended): The back illuminated photodetector according to claim 1,

wherein a highly-doped impurity semiconductor layer with impurities of the first conductive type

added thereto at a high concentration is provided in [[the]] a bottom portion of the recessed

portion within the second superficial surface layer of the semiconductor substrate.

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Claim 8 (Currently Amended): The back illuminated photodetector according to claim 1, wherein a highly-doped impurity semiconductor layer with impurities of said first conductive type added thereto at a high concentration is provided in a second superficial surface layer in [[the]] an outer edge portion of said semiconductor substrate.